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6. (Amended) The apparatus of claim 1 wherein said first ends of said plurality of vanes are [positioned] spaced further apart from each other than said second ends of said plurality of vanes.

Please add the following claims:

10. The apparatus of claim 1 wherein said first ends of said plurality of vanes are spaced closer apart from each other than said second ends of said plurality of vanes.

REMARKS

Claims 1 to 9 are pending in the subject application. Claim 10 has been added.

Claims 1 to 3 and 6 have been amended for clarification purposes. Favorable reconsideration in light of the amendments and the remarks which follow is respectfully requested.

1. 35 USC §112 Rejection

Claim 6/1 has been rejected under 35 USC §112, first paragraph. The Office states that Claim 6/1 is rejected "as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or to which it is most nearly connected, to make and/or use the invention." More specifically, the Office states that "the specification does not disclose an optical apparatus having a plurality of vanes, each has a first end and a second end wherein the first end of the vanes satisfy *both* of the following structures: *First*, the first ends are positioned closed to each other, and *Second*, the first ends are positioned further apart from each other as recited in the claim." (Emphasis added)

Claim 1 has been clarified by amendment. Claim 6 has also been clarified by amendment. Claim 10 has been further added. It is believed that the claims as amended and added fully meet the requirement as to scope of enablement.

In view of the above amendments and remarks, reconsideration and allowance of Claim 6/1 is respectfully requested.

Claims 2-5 have been rejected under 35 USC §112, second paragraph. The Office states that Claims 2-5 are rejected "as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention."

More specifically, regarding Claims 2 and 3, the Office states that "It is not understood how applicant can compare a surface to an optical lens." Accordingly, Applicant has clarified Claims 2 and 3 by amendment. It is believed that the claims as amended fully meet the requirement that the claims particularly point out and distinctly claim the subject matter which the applicant regards as his invention.

In view of the above amendments and remarks, reconsideration and allowance of Claims 2-3 is respectfully requested.

Claim 4 has been rejected under 35 USC §112, second paragraph. The Office states that Claim 4 is rejected "as being incomplete for omitting essential elements, such omission amounting to a gap between the elements."

Applicant respectfully submits that configurations which allow an apparatus, such as that claimed in the present invention, to be mounted on field goggles are well-known to those skilled in the art. Accordingly, Claim 4 is in accordance with the

requirements of 35 USC §112. Claim 5 depends from Claim 4, and, likewise, meets the requirements of 35 USC §112.

In view of the above amendments and remarks, reconsideration and allowance of Claims 4-5 is respectfully requested.

2. 35 USC §102 Rejection

Claims 8-9 have been rejected under 35 USC §102(b) as being anticipated by Jones. The Office states that "While Jones does not clearly state the apparatus is mounted on a field goggle; however, such a feature is inherent from the Jones' teaching because at column 1 he states that the apparatus can be used by a battlefield troop in a night time."

Applicant respectfully submits that Claim 8 is directed to lens surfaces having a substantially wide Field of View (FOV), and that such devices are not inherent in the Jones reference. The Jones reference is a device with vanes, in a honeycomb configuration, that produce tubes with a length-to-width ratio that does not exceed the length-to-width ratio of the FOV. The length-to-width ratio of such tubes in such a device is not deep enough to give good glint protection for a wide FOV lens surface. Applicant has recognized an existing problem: how to get tubes long enough to provide effective glint protection without vignetting the view through an optic having a wide FOV. The present invention is directed towards solving this problem.

Accordingly, the invention defined by Claim 8 is not anticipated by Jones. Claim 9 depends from Claim 8, and, likewise, is patentable over Jones.

3. 35 USC § 103 Rejection

Claims 1-5 and 7-9 have been rejected under 35 USC §103(a) as being unpatentable over Jones in view of Softly.

The Office acknowledges that the “feature missing from the Jones reference is that he does not teach that the first ends of the concentric circular vanes are positioned closer to each other with respect to the second ends of the vanes.” The Office, however, refers to the Softly reference and concludes that “it would have been obvious to one skilled in the art at the time the invention as made to modify the optical apparatus having a plurality of concentric circular vanes in combination with radial vanes as provided by Jones by rearranging the ends facing the surface of an optical lens of the vanes closer to each other with respect to the opposite ends of the vanes as suggested by Softly **for the purpose of increasing the reduction of reflected light.**”

Applicant respectfully submits that the suggested combination of the Jones’ and Softly references is not obvious because there is no motivation or suggestion to combine the references as proposed by the Office, nor is there a reasonable expectation of success in such a combination. The Softly reference is concerned with projection devices, which require **re-directing incoming light to the surface of a screen** to improve the image contrast on the surface of the screen. The Jones reference and the present invention, on the other hand, are concerned with viewing devices such as wide-angle field-of-view (FOV) optics like night vision goggles, which require **reduction and elimination of all light reflection on the surface of the device.**

(1)

The Softly reference “relates to a light masking device **for improving image contrast** on a television or similar video display screen under conditions of high

ambient light." (Col 1, lines 4-7). This is accomplished by placing an optical filter in front of the screen, which comprises a grating of spaced elongated planar slats that converge towards the screen of a television or video display screen. It is stated that "In a television studio most of the ambient light falls toward the monitor screen **from an upward direction rather than from the side**, and so the horizontally extending slats 21 are suitably **positioned to intercept** the light which would otherwise be reflected from the screen and impair the quality of the image." (Col 2, lines 52-57). These slats "are oriented so as to permit substantially **interference-free viewing from a selected viewing position.**" (Col 1, lines 29-31).

Thus, the Softly reference is not at all concerned with tilting vanes or slats to reduce reflection of light from an object. Rather, Softly is concerned with **re-directing incoming light to the screen surface** to improve the image contrast on the surface of the screen and to promote a clearer view of the screen. Jones, on the other hand, is directed towards **avoiding all outward reflections of light** from a surface, so that the surface may not be viewed by observers.

Thus, Applicant respectfully submits that such a modification of Jones in light of Softly is not obvious because there is no suggestion or motivation to do so. Rather, it would be contrary to the teachings of the references to design a device that prevents light from hitting and reflecting off of a surface by modifying Jones (a device specifically designed to prevent outward reflections of light from the surface) with features from Softly (a device that is **specifically designed** to re-directing incoming light to the surface). No likelihood of success in such a combination would reasonably be expected.

Accordingly, the invention defined by Claim 1 is not obvious over Jones in view of Softly. Claims 2-5 and 7 depend from Claim 1, and, likewise, are patentable over Jones in view of Softly.

Regarding Claims 8-9, the Office states that "While Jones does not clearly state the apparatus is mounted in a field goggle; however, such a feature is inherent from the Jones' teaching."

Applicant respectfully submits that Claim 8 is directed to lens surfaces having a substantially wide Field of View (FOV), and that such devices are not inherent in the Jones reference. Applicant has recognized an existing problem: how to get tubes long enough to provide effective glint protection without vignetting the view through an optic having a wide FOV. The present invention is directed towards solving this problem. The Jones reference is a device with vanes, in a honeycomb configuration, that produce tubes with a length-to-width ratio that does not exceed the length-to-width ratio of the FOV. The length-to-width ratio of such tubes in such a device is not deep enough to give good glint protection for a wide FOV lens surface. Further, the Softly reference adds nothing to the Jones' reference regarding use of the apparatus by mounted it on lens surfaces having a substantially wide Field of View (FOV).

Accordingly, the invention defined by Claim 8 is not obvious over Jones in view of Softly. Claim 9 depends from Claim 8, and, likewise, is patentable over Jones in view of Softly.

CONCLUSION

In light of the above amendments and discussion, Applicant respectfully requests early consideration and allowance of the subject application.

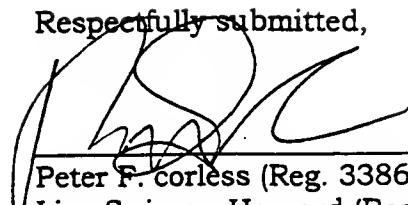
Should the Examiner wish to discuss any of the amendments and/or remarks made herein, the undersigned attorney would appreciate the opportunity to do so. Thus, the Examiner is hereby authorized to call the undersigned, collect at the number shown below.

U.S.S.N.: 09/094,052

Jones

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Respectfully submitted,



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The dating stamp of the Patent and Trademark Office hereon will be taken as the date of filing of:

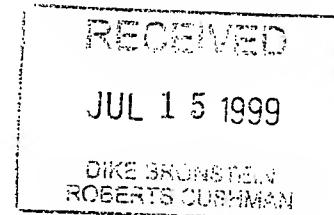
**Amendment Transmittal; Response to Office Action; and
check in the amount of \$435.00 to cover the fee for
a three month extension of time.**



07-09-1999

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